

Add the correct operations and parentheses to make each equation a true statement. Prove it works.

There are many solutions. Justification is required

1) $4 \quad 4 \quad 4 = 4$ $(4 - 4) + 4 = 4$ $4 - 4 = 0$ and $0 + 4 = 4$ $(4 \times 4) \div 4 = 4$ $4 \times 4 = 16$ and $16 \div 4 = 4$

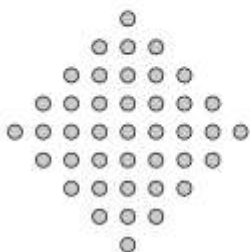
2) $2 \quad 4 \quad 8 = 0$ $(2 \times 4) - 8 = 0$ $2 \times 4 = 8$ and $8 - 8 = 0$

Use the three or four of the numbers 4, 5, 6, and 7 to make an equation that has the same value on both sides. Prove the equation works.

3) $\square \quad \square \quad \square \quad \square = 2$ $[(4 \times 5) - 6] \div 7 = 2$

4) ***How many circles are there?***

Please think about using multiplication to solve this problem and write a math sentence to show how you solved it.



See possible student solutions for in Lesson 1, worksheet 2; other solutions that work are acceptable.

Find the missing numbers. Add parentheses as needed. Prove your answer.

5) $\square \times 3 + 4 = ; 19$ $(5 \times 3) + 4 = 19$ $5 \times 3 = 15$ $15 + 4 = 19$

6) $5 + 2 \times 4 = \square$ $5 + (2 \times 4) = 13$ $2 \times 4 = 8$ $5 + 8 = 13$

7) $28 + 22 = \square + 21$ 21 is 1 less than 22 so add that 1 to 28 so the number in the box is 29

8) Why do we have order of operations in mathematics? so when we can communicate mathematically using numbers and symbols, there will be no confusion about the computation.

9) What is the purpose of parentheses in mathematics, and when are they used? So the person reading the expression or equation knows which operation to compute first.

10) What is the difference between an expression and an equation? A mathematical sentence in which two expressions are connected by a symbol of equality; the two mathematical expressions represent the same quantity. An expression represents a quantity.